CT Forum on DNA Testing and Genomic Medicine, Jan 23, 2020 Biographies of Speakers (Alphabetical Order)

Dr. Thomas Agresta is a seasoned family physician, clinical informatician, educator, administrator, researcher and innovator with a history of bringing together multidisciplinary teams to focus on developing novel methods for creating, using and evaluating technology in both clinical and teaching settings. He has a bachelor's degree in biomedical engineering from Stevens Institute of Technology, a medical degree from New Jersey Medical School and master's degree in biomedical informatics from Oregon Health Sciences University. He has held state-level leadership roles in adoption and implementation for Health Information Exchange and Electronic Health Records. Dr. Agresta also oversees the Electronic Medical Records for the Family Medicine residency clinic at St. Francis Hospital. He serves as the section leader for Informatics in the Connecticut Institute for Primary Care Innovation, Director of Clinical Informatics at the Center for Quantitative Medicine at UConn Health and a Physician Informatician working with the Office of Health Strategy of Connecticut to facilitate Health Information Exchange. His research interests include using technology to enhance the care of patients while increasing efficiency for providers. All of this work serves to promote leveraging technologies for interoperability across systems to reduce cost and improve care delivery.

Jacques Banchereau, Ph.D. is a Professor and Director of Immunological Sciences at The Jackson Laboratory – Genomic Medicine campus in Farmington, Connecticut. He has over 35 years of expertise in human immunology research with a strong track record of over 500 research publications. His research lab is currently leading discoveries in the field of cancer, vaccines, and human autoimmune diseases. His ongoing studies include using long-read sequencing and genomic profiling technologies to reveal novel cancer isoforms that may serve as vaccine targets; identifying signatures of pediatric autoimmunity; responses to pneumococcal vaccination in the elderly; and responsiveness to vaccine adjuvants. Previously, he contributed to the discovery of IL-4, IL-10 and GM-CSF, and developed DC-based vaccines for melanoma and HIV treatment. Additionally, together with Virginia Pascual, M.D. (Director of the Drukier Institute for Children's Health at Weill Cornell Medicine), he identified the role of type I interferon in SLE and IL-1 in SOJIA, leading to the application of IL-1 antagonists for juvenile arthritic disease.

Danielle Bonadies, MS, CGC is the Director of the Genetics and Co-Founder of My Gene Counsel, a digital health company that links current, updating, evidence-based information to genetic test results. Danielle practiced as a clinical genetic counselor at Yale School of Medicine for a decade, where she was the Assistant Director of the Cancer Genetic Counseling Program. She designed and ran several interactive, on-line patient education and communication sites, and was involved in the cancer genetics education of thousands of patients, clinicians and students. Danielle has co-authored multiple book chapters and articles in genetic counseling and testing and was involved in the collection, documentation and publication of several key articles about the high rate of result misinterpretation amongst clinicians ordering genetic testing. At My Gene Counsel, Danielle oversees the development of digital genetic counseling tools and takes an active role in technology development.

Miriam DiMaio received her undergraduate degree from the University of Wisconsin-Madison. After completing a master's degree in social work from Boston University in 1980, she switched her focus to human genetics and joined a major research effort at Massachusetts General Hospital focused on identifying the underlying molecular basis of Huntington disease. After moving to New Haven in 1983, Miriam because the supervising genetic counselor in the Prenatal Diagnosis Unit of the Department of Genetics at Yale School of Medicine, supervising the operation of a large prenatal diagnosis program which at times provided clinical services for more than 5000 patients per year. In 1984, she became board certified in genetic counseling by the American Board of Medical Genetics. Over 34 years, her responsibilities at Yale included administration and supervision of the Prenatal Diagnosis Unit, patient care, teaching of fellows, residents, medical students, and clinical research. She also led the presymptomatic testing program for Huntington disease since its inception in at Yale 1994, provided genetic counseling for hemophilia patients, and was involved in studies of the genetics of autism and Alzheimer disease. In 1996, she received the Regional Leadership Award from the National Society of Genetic Counselors. Her 23 peer-reviewed publications include first authorship on a paper in the New England Journal of Medicine describing the first biochemical screening test for Down syndrome in pregnant women. She is also the first author on a book for obstetricians and genetic counselors about prenatal diagnosis published by Wiley in 2010. In 2017, Miriam joined the faculty of the Frank H. Netter, MD School of Medicine where she teaches medical genetics and is charged with integrating genetics into the medical school curriculum. At the Frank H. Netter, MD School of Medicine, Miriam lectures in and/or facilitates small group events in the Foundation of Medicine, Clinical Arts and Sciences, and Scholarly Research Clinical Capstone components of the curriculum. She is the faculty advisor for the medical students' Bioethics Interest Group and the Jewish Medical Students Alliance, and assists Dr. Carolyn Macica in advising the Rare Disease Day initiative.

Dr. Richard Frank studied at Harvard College (BA) and the SUNY Stony Brook School of Medicine (MD). After postgraduate training at Columbia Presbyterian Medical Center and Memorial Sloan Kettering Cancer Center (MSK) he joined the faculty of MSK, where he held an NIH grant for research on the molecular basis of acute leukemia. In 2000, he moved to CT and joined the Whittingham Cancer Center at Norwalk Hospital, where he initiated the oncology clinical trials program and remains a full-time medical oncologist/hematologist. He is presently Director of Cancer Research for Nuvance Health (7 hospital system including Danbury, Norwalk and New Milford Hospitals in CT) and Consultant in Medical Oncology at MSK. His clinical specializations are pancreas, prostate and hematologic cancers. A focus of his research is the early detection of pancreas cancer focusing on those at highest risk because of genetics/family history or new-onset diabetes after the age of 50. He has been awarded the Physician-Scientist Award from the ACCC and the Humanitarian Award from the Leukemia-Lymphoma Society. He is the author of numerous peer-reviewed publications and the book *Fighting Cancer with Knowledge and Hope: A Guide for Patients, Families and Healthcare Providers* (Yale University Press 2013).

Allan Hackney serves as Connecticut's Health Information Technology Officer within the Office of Health Strategy, a role designated to build and implement a statewide Health Information Exchange, oversee the State's All Payer Claims Database and coordinate the implementation of a statewide health information technology strategy. Previously, Allan served as SVP & Chief Information Officer (CIO) at John Hancock Financial Services with oversight of the company's technical teams. He has also led IT and operations organizations at AIG Consumer Finance Group and Bank of America Commercial Finance. Allan started his career at GE, where he held a number of leadership positions in the USA and Japan for GE Capital's global consumer finance business. Professionally, he holds CISM and CRISC certifications. He was named a Computerworld Premier 100 CIO during 2012, and is a Mentor in Columbia University's Technology Management Masters program. In the community, Allan is co-founder and member of the Regional Board of Directors of Build On in Boston, a national non-profit organization that empowers youth is to break the cycle of poverty, illiteracy and low expectations through service and education. He is also on the Board of Directors for Common Impact, the national leader in developing tomorrow's leaders through skill-based volunteering and community engagement. Allan graduated with a Bachelor's degree from Colgate University. He and his wife Jane reside in New Canaan, CT.

Sharon Hines (patient) MSN, APRN, has more than 30 years' experience working in hospice, radiation oncology and in an oncology private practice. Nearly 12 years ago, out of the blue, she was diagnosed with stage IV non-small cell lung cancer. Her own knowledge and experience confirmed what she was told by three different oncologists; her prognosis was a year, give or take a few months. It was during an initial consult in Boston, she learned there were several new molecular targets being tested for in lung cancer. A year later she arranged for her biopsied lung tissue to be sent to Boston for molecular profiling and learned her lung cancer had a newly discovered gene rearrangement known as anaplastic lymphoma kinase or alk positive lung cancer. While the good news was a clinical trial for alk positive patients in Boston was showing remarkable results, she would not be eligible for the trial until she exhausted all standard therapy. It would be another year of chemotherapy and significant neurotoxicity before she was eligible for the trial which had recently opened at YNHH. Today she will share with you her experiences as a clinical trial participant and with genetic counseling.

Dr. Travis Hinson is a physician scientist and dual faculty member of UConn Health and The Jackson Laboratory for Genomic Medicine in Farmington, CT. He completed his medical school training at Harvard Medical School and cardiology clinical training at the Brigham and Women's hospital in Boston, MA. He completed a post-doctoral research fellowship in the laboratory of Christine Seidman at Harvard Medical School in the Department of Genetics. He is the Director of Cardiovascular Genetics at UConn Health where he provides clinical care for patients with inherited cardiac disorders and runs an NIH-funded research laboratory located at JAX where he studies topics related to heart failure functional genomics and cardiac regeneration.

Michael Jefferson, M.D. is the Medical Lead for Connecticut Anthem Blue Cross Commercial. He has worked for 5 Years with Anthem. Undergraduate Majors: Bio-Medical Ethics at Frostburg State University and Cell Biology at George Washington University. Medial Degree

from University of Maryland School of Medicine. Fellow of American College of Emergency Physicians with completion of Emergency Medicine Residency at Henry Ford Hospital in Detroit. Practiced Emergency Medicine in high volume, high-trauma settings for 30 years. Vice President of Quality and Systems Integration at D.C. Hospital. Numerous start-ups in Emergency Medical and Hospitalist Programs, Integrated Care, Hospital Systems and Non-profits for 25 years. Co-Founder recently divested: Clinical Trials Site Organization for Pharmaceuticals, Devices and Clinical Tests. Luckiest life events: Being married (only once) to an amazing human being with a 21-year-old daughter and 4 year-old son. Happy to call Branford, Connecticut my new home just 20 feet from the Sound.

Dr. Jeffrey Langsam is Cigna's Market Medical Executive for the Connecticut market. He has a diverse background in managed care including utilization review, network strategy, sales support and accountable care organization leadership. Dr. Langsam is board certified in both medical oncology and hematology, and previously spent 8 years in clinical practice in the Hartford, Connecticut area. In addition to his patient care responsibilities while in practice, he served as the medical director of his multispecialty group laboratory, and taught residents and medical students at the University of Connecticut School of Medicine as Assistant Professor of Medicine. He completed his fellowship in hematology/oncology at the State University of New York at Downstate, and his residency in internal medicine at the University of Connecticut School of Medicine. He is a graduate of the Lake Erie College of Osteopathic Medicine.

Stephen R. Latham, JD, PhD is Director of the Yale Interdisciplinary Center for Bioethics. A graduate of Harvard College, Harvard Law School, and UC Berkeley's doctoral program in Jurisprudence, Latham is a former healthcare business and regulatory attorney, and served as Director of Ethics Standards at the AMA before entering academia full-time. At Yale, he chairs the Human Subjects Committee, co-chairs the Embryonic Stem Cell Research Oversight Committee, and is a member of the Pediatric Ethics Committee of Yale-New Haven Children's Hospital. He is currently Secretary of the American Society for Bioethics and Humanities, from which he received a Distinguished Service Award in 2010. He is also a member of the Medical Review Board of Connecticut's Department of Children and Families. His 100+ articles on bioethics and health law have appeared in numerous law reviews, bioethics journals, and medical and scientific journals. He is also co-editor of several books, including Genetics, Ethics and Education, a 2017 book on the use of genetic testing in public education from Cambridge University Press.

Emily Lemiska – patient

Rich Lisitano recently celebrated 33 years of service at YNHHS. Rich came to YNHH as Assistant Director of Pharmacy in 1986 and has held several different positions of increasing responsibilities. Rich is currently Vice President of Administration at YNHH. Rich's calling is working in teams to build new services and programs that improve patient care. Rich has a great passion for leveraging new technologies to improve patient care including automation of workflows, implementation of new clinical programs and applying genomic science to healthcare. Rich and his wife Ann, both University of Connecticut alumni, live in Guilford, Ct where they raised three children.

Michael F. Murray, MD, is Director of Clinical Operations, at the Center for Genomic Health Yale School of Medicine. Dr. Murray's work is focused on understanding the value of screening to identify individuals with a cancer and heart disease risk for which preventive-care interventions are available. He joined Yale in 2018 as the director of clinical operations in the newly formed Yale Center of Genomic Health. In 2019 he worked with the leadership at Yale to launch *Generations*, a population health project that will enroll at least 100,000 Connecticut volunteers. This project links genomic data with electronic health data in order to enable both research and patient care delivery. From 2013 to 2018 he was the Geisinger Health System's first director of clinical genomics. At Geisinger he led the design and implementation of the *GenomeFIRST* program. *GenomeFIRST* delivers risk results regarding cancer and heart disease to patients and their healthcare providers, and then guides their clinical management in ongoing screening and prevention. Prior to his time at Geisinger he was the clinical chief of genetics at Brigham and Women's Hospital for nine years while on the faculty at Harvard Medical School. He is a physician and is board certified in Internal Medicine and Medical Genetics. michael.murray@yale.edu

Dr. Jeffrey Pollard is a double board-certified physician and surgeon with a B.S. in Health Psychology from Duke and M.D. from Vanderbilt. He completed his surgical residency at Stanford and fellowship training at Tulane. In his role as Director of Medical Affairs, he is primarily responsible for providing 23andMe with health-focused strategic guidance, maintaining the clinical integrity of the company's health-oriented consumer products, services, research, and communications, and preserving a channel for unbiased 2-way dialogue with the medical and patient communities.

Dr. Joseph Quaranta, M.D. is the President of the Community Medical Group (CMG), one of the largest Independent Practice Associations in Connecticut. It is a clinically integrated network of approximately 1000 primary care and specialist providers based in over 200 independent practices throughout Connecticut. CMG's mission is to provide patient centered and high-quality care while supporting the continued success and prosperity of independent medical practices. CMG has developed multiple Accountable Care Organizations with over 175,000 patients managed in these programs. They have demonstrated improved quality outcomes and lowered the costs of care delivery in their ACOs. CMG has developed their own care management program which oversees the management of medically complex and high-risk patients. They have numerous quality improvement programs working to continuously improve the quality and efficiency of care delivered across their network. CMG has implemented information technology solutions to integrate data across their delivery network, allowing data analytics to be performed across their entire population. Dr. Quaranta's special interest lies in the areas of physician engagement and practice transformation, with a focus on small and independent practices. His work has focused on transitioning independent practices to new care delivery models focusing on population health and value-based care. Dr. Quaranta has been practicing internal medicine at Quinnipiac Medical of Branford since 2001. He did his residency training at Yale-New Haven Hospital and is a graduate of the NYU School of Medicine and Holy Cross College. He lives with his wife and two daughters in Orange, CT.

Dr. Gualberto Ruaño has been an innovator in the biotechnology industry for 25 years, and is a pioneering expert in the science and clinical deployment of personalized medicine. His continued record of scholarship and innovation in translational genomics and clinical decision support counts over 120 publications and 12 patents. He has been principal investigator of research and development grants totaling \$11 M from AHRQ, NIH, NSF and DOE. He has pioneered physiogenomics (U.S. Patent 7,747,392) based on multi-gene DNA markers and bioinformatics for the diagnosis of disease and prediction of human physiological responses to a wide array of clinical treatments (neuro-psychiatric and cardio-metabolic drugs, exercise, diet, surgery, hospitalization). He founded Genaissance Pharmaceuticals in 1997 as the pioneer company in pharmacogenomics, and served as Chief Executive and Chief Scientific Officer. Dr. Ruaño developed fundamental technology for genetic associations based on gene haplotypes. Dr. Ruaño invented the Coupled Amplification and Sequencing System (U.S. Patent 5,427,911) in 1992 for the rapid determination of sequence variation which enabled the first FDA-approved pharmacogenomic diagnostic system. Dr. Ruaño was a founding Director of the Personalized Medicine Coalition in Washington, D.C. and senior editor of the journal Personalized Medicine (London). He has served on steering committees working with the FDA on pharmacogenomic guidelines and as a member at the Manhattan Institute's 21st Century FDA Task Force. Dr. Ruaño also served on advisory committees of the National Academy of Clinical Biochemistry instituting guidelines for pharmacogenetic testing in the clinical laboratory. Dr. Ruaño is Principal Investigator at the Institute of Living of Hartford Hospital, Assistant Professor of Psychiatry at UConn School of Medicine and Medical Director of the Genomas Laboratory of Personalized Health. He is a Fellow of the National Academy of Clinical Biochemistry and of the American Institute for Medical and Biological Engineering. He serves as a member of the Clinical Pharmacogenetics Implementation Consortium and the Pharmacogene Variation Consortium. Dr. Ruaño was elected to the Connecticut Academy of Science and Engineering in 2004. He was awarded the 2005 Medical Technology Award by the Biomedical Engineering Alliance of Connecticut for his contributions to personalized medicine and molecular diagnostics. He obtained his B.A. degree from Johns Hopkins University, where he was elected to Phi Betta Kappa. He obtained M.D. and Ph.D. degrees from Yale University, where he was a Fellow of the NIH Medical Scientist Training Program and the Ford Foundation. He is one of the 28 alumni in the University's history honored in the Yale Innovation Timeline.

Dr. Eric Schadt, PhD. (CEO, Sema4) served as Chair of the Department of Genetics and Genomic Sciences and was founding Director of the Icahn Institute for Genomics and Multiscale Biology from 2012 through 2017 at the Icahn School of Medicine at Mount Sinai in NY. In June 2017 he spun out parts of his Mount Sinai efforts into Sema4, a next generation health intelligence company enabling physicians and patients with state of the art genomics tests and interpretations driven by advanced machine learning approaches to better prevent, diagnose, and treat disease. Before Mount Sinai, Dr. Schadt was the Chief Scientific Officer at Pacific Biosciences, overseeing the scientific strategy for the company, including creating the vision for next-generation sequencing applications of the company's technology. He also founded Sage

Bionetworks, an open access genomics initiative designed to build and support databases and an accessible platform for creating innovative, dynamic models of disease. Dr. Schadt's primary efforts involve integrating large-scale, high-dimension molecular, cellular, and clinical data to better diagnose and treat disease, and maintain wellness, motivated by the genomics and systems biology research he pioneered at Rosetta Inpharmatics and the later Merck to elucidate the complexity of common human diseases and drug response.

Dr. Wade Schulz is an Assistant Professor of Laboratory Medicine and computational health care researcher at Yale School of Medicine. He received his PhD in Microbiology, Immunology, and Cancer Biology and MD from the University of Minnesota. He is the Director of Informatics for the Department of Laboratory Medicine, Director of the CORE Center for Computational Health, and Medical Director of Data Science for Yale New Haven Health System. Dr. Schulz has over 20 years' experience in software development with a focus on enterprise system architecture and has a research interests in the management of large, biomedical data sets and the use of real-world data for predictive modeling. At Yale, he has led the implementation of a distributed data analysis and predictive modeling platform, for which he received the Data Summit IBM Cognitive Honors award. Other projects within his research group include computational phenotyping and the development of clinical prescriptive models for precision medicine initiatives. His clinical areas of expertise include molecular diagnostics and transfusion medicine, where he has ongoing work assessing the use, safety, and efficacy of pathogen-reduced blood products.

Dr. Joseph Tucker studied at the University of Pennsylvania (BSE) and the SUNY Downstate School of Medicine (MD). After postgraduate training at the University of Connecticut and Connecticut Children's, he joined the faculty of UConn Health, where he is the interim director of the Division of Genetic Medicine and cares for patients with rare genetic conditions.

Samantha Wesoly, M.S., LCGC, is a licensed and board-certified genetic counselor. She received her Master of Science in Human Genetics at the University of Pittsburgh Graduate School of Public Health. Currently, she works as a pediatric genetic counselor at the Connecticut Children's Medical Center. Samantha's clinical interests include medical genetics, neurogenetics, exome sequencing, utilization management of genetic testing, and genetics education for physicians. Past research interests include studies focusing on the genetics of human facial morphology and the genetics of autism. Samantha is certified by the American Board of Genetic Counselors as a genetic counselor, a Connecticut-state licensed genetic counselor, and is a member of the National Society of Genetic Counselors.

Dr. Robert Zavoski is the Medical Director of the Connecticut Department of Social Services (DSS), home of many health care programs including Connecticut's HUSKY Health Program which serves over 1 in 5 Connecticut residents. Among many projects, he helped develop Connecticut's unique and successful, self-insured alternative to Medicaid managed care. Under this model, access to primary and preventive services have greatly expanded, creative payment methodologies have improved obstetric outcomes and incentivized primary care providers to become Person-Centered Medical Homes; measures of access to care, quality of care, and member and provider satisfaction continue to improve while program costs have stabilized.

Prior to joining DSS, he was the Medical Director of an FQHC in Hartford and the Director of the Primary Care Center at Connecticut Children's Medical Center. Dr. Zavoski is a graduate of the University of Pennsylvania, New York Medical College, Pitt's Graduate School of Public Health, and completed a pediatric residency and chief residency at the Children's Hospital of the King's Daughters. His wife, Martha Steeves, is a pharmacist and author and their daughter, Kate, is a practicing attorney in Connecticut.